MINUTES OF THE PUBLIC WORKS COMMITTEE
September 9, 2019
East Conference Room

Present: Councilmembers Anderson, Rader & Bullock

Also Present: City Engineer Papke, Assistant Law Director Swallow

Call to Order: 6:33 p.m.

> **RESOLUTION 9087-19 - A RESOLUTION to take effect immediately provided it receives the affirmative vote of at least two thirds of the members of council, or otherwise to take effect at the earliest period allowed by law, authorizing the Mayor of the City of Lakewood, or his designee, to prepare and submit an application to participate in the Ohio Public Works Commission State Capital Improvement Program, Local Transportation Improvement Program or any other appropriate Ohio Public Works Commission program that the Summit Outfall Replacement Project qualifies for and to execute contracts as required.** ***(Referred to Public Works Committee 9/3/19)***

Mr. Papke distributed materials regarding the grants to be submitted. He reviewed the portion of the grant application regarding watermain replacement in 2021. Three watermains are planned for replacement – Lauderdale, Leedale, and Elbur. He discussed the process of identifying these. Leedale was selected because it had four breaks within one month. Upon further investigation, it was determined that the main had low flow from the hydrant. Lauderdale and Elbur were selected because the Fire Department advised of low flow rates. The cost of this work will be approximately $5 million. Lauderdale will be the most expensive. Lauderdale and Elbur will include manhole separations.

Mr. Papke remarked that all of these watermains are close to 100 years old. Issues result from build up that accumulates in the pipes.

The Committee discussed the impact of low flow rates in fire response in the City.

The Committee discussed the coordination of utility projects like this with street resurfacing. Best efforts are made to coordinate so that new streets are not ripped up. In this case, that wasn't possible with Leedale and Lauderdale.

The Committee discussed the City's new policy on replacing lead service lines on the private property side. The new EPA regulations require the City to pay for this. All agreed that is was a best practice and ought to be done for quality and safety. The City has been doing these in-house.

In response to a question, Mr. Papke clarified that the advertising budget is for public bidding purposes and legal notice in the Plain Dealer. Also, all residents of these streets receive a letter in advance of the work starting.

Mr. Papke discussed the Summit outfall rehabilitation project for which he is also applying for funds. The project is planned to be designed in 2020 and construction start 2021. The City

applied for funds for this project last year and was denied. It is 30% designed. The City has reached out to adjacent property owners to potentially coordinate. The Committee discussed the erosion at the site and the final design.

Mr. Papke explained the logistics of the grant applications and their scoring processes. He remarked that the grants are competitive, and that the City is not applying for a set amount but whatever is available. These projects were selected out of need but also for their ability to earn high scores for public safety improvements.

The Committee expressed interest in opening up a broader conversation about watermain replacement strategy and if "catching up" is possible with additional funds dedicated to this purpose.

A motion was made by Councilmember Anderson and seconded by Chairman Rader to recommend Resolution 9087-19 for adoption by Council.

All members voted in favor.

Without objection, the Chair approved the minutes of the July 22nd Public Works Committee. Minutes were emailed to all members in advance of the meeting.

Public Works Committee adjourned at 7:03 p.m.

City of Lakewood
2021 Watermain Replacement Project

Engineer's Opinion of Probable Construction Costs

SUMMARY

Length (ft)	Watermain	Total
2,775	Lauderdale Avenue	$ 2,270,000.00
660	Leedale Avenue	$ 422,500.00
1,265	Elbur Ave	$ 1,186,000.00
4,700	Construction -Total	$ 3,878,500.00

The estimated useful life of the Watermain Replacement Project is 50 years.

Engineering and Design	$	225,000.00
Construction Administration	$	225,000.00
Construction	$	3,878,500.00
Construction Contingency	$	387,850.00
Advertising	$	500.00
TOTAL PROJECT ESTIMATE	**$**	**4,716,850.00**

Elbur Avenue Water Main Replacement

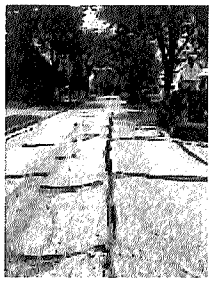
Sewer Configuration
Sewer Installation Year: 1920
Combination Sewer Size: 18"
Sewer Material: VCP
Number of Combination Sewers: 5
Average Depth of Combination Sewer: 10'
CSO Outfall Watershed: CSO 059C
Sewer Outfall Watershed: LEWS 1040

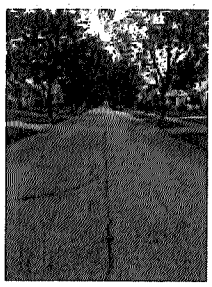
Pavement Information
Pavement Material: Asphalt
Last Resurface Year: 2008
2018 PCR: 75

Water Information
Water Installation: 1919
Watermain Size: 6"
Water Material: Cast Iron
Distance To Combination Sewer: 7'

Household Statistics
39 Single Family Residential Units
21 Two-Family Residential Units
81 TOTAL RESIDENTIAL UNITS

- Manholes
- Combination Sewers
- Water Main
- Project Impact Limits
- Parcel Boundaries
- Pavement Extent


Looking North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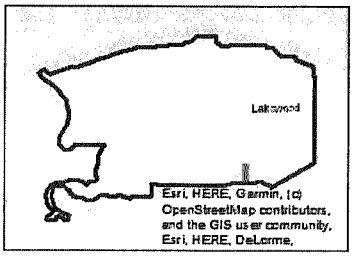

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Department of Public Works
Division of Engineering & Construction
Sources: U.S. Census Bureau Records, City of Lakewood Records
Drawn By: Josh Conrad, GIS Technician

Opinion of Probable Construction Cost

Summit Outfall Rehabilitation
Bluff Stabilization

KS ASSOCIATES

Project Number: 19089
Prepared by: KS/DAP
Checked by: MKP
Approved by: MKP
8/30/2019

Estimate Level: 30%

Item	Item Description	Quantity	Unit	Unit Cost	Item Subtotal
Bluff Stabilization					
	Non-Structural Costs				
	Marine Equipment Mobilization	1	LS	$45,000	$45,000
	Land Equipment Mobilization	1	LS	$25,000	$25,000
	Site Clearing	1	LS	$5,000	$5,000
	Shale Excavation	135	CY	$110	$14,850
	Temporary Shoring	1	LS	$10,000	$10,000
	Earth Excavation	50	CY	$35	$1,750
	Sewer Pipe Demolition	1	LS	$5,000	$5,000
	Shale Removal on Bluff Face	1	LS	$20,000	$20,000
	Reline 24" Sewer Outflow Line	220	LF	$100	$22,000
	Collar in 24" Sewer into Sheet Pile Wall	1	LS	$2,500	$2,500
	Chain Link Fence	60	FT	$60	$3,600
	Temporary Work Platform Construction & Removal	150	TONS	$100	$15,000
	Site Restoration	1	LS	$8,000	$8,000
	Dewatering & Sewer Bypass	1	LS	$10,000	$10,000
	Install 2 New Light Poles	2	EACH	$8,000	$16,000
	Sediment and Erosion Control Measures	1	LS	$7,500	$7,500
	Guardrail - Remove, Store and Reinstall	1	LS	$750	$750
	Guardrail Concrete Foundations - Remove and Reinstall	1	LS	$750	$750
	Signs - Remove, Store and Reinstall	2	EACH	$500	$1,000
	New Concrete Walk	900	SF	$15	$13,500
	Construction Layout, Staking & Surveying	1	LS	$12,500	$12,500
	Utility Allowance - Overhead Wires and Gas Line	1	LS	$20,000	$20,000
	Revetment				
	2-4 Ton Armor Stone	1,100	TONS	$90	$99,000
	3-5 Ton Toe Stone	150	TONS	$90	$13,500
	#57 Stone	1,050	TONS	$50	$52,500
	Sand Prefill	403	TONS	$40	$16,136
	Concrete Module Wall				
	4'X4"x8' Concrete Module & conc. Fill	84	EA	$4,000	$336,000
	4,000 PSI Concrete Fill	180	CY	$500	$90,000
	#8 Rebar, 8' Long	168	EA	$38	$6,465
	1 3/8" Tie Rods, Grouted into Shale	700	FT	$25	$17,500

	Sheet Pile Wall					
		NZ-14 Sheet Pile	1,300	SF	$38	$49,527
		W10x49 Waler Beam	50	FT	$86	$4,288
		1 3/8" Tie Rod, 45' Long	135	FT	$20	$2,700
		Cap Channel	50	FT	$61	$3,063
		Concrete Backfill	430	CY	$500	$215,000
		Conrete Deadman Wall	3	EA	$2,500	$7,500
	New Outfall Pipe					
		60" Diameter Steel Pipe, 55' Long	1	EA	$36,000	$44,000
		10' X 20' Junction Box	1	EA	$55,000	$55,000
		1" Stainless Steel Plate with Concrete Pad	2	EA	$10,000	$20,000
					New Bluff Stabilization Subtotal	$1,291,877
TOTAL ESTIMATED CONSTRUCTION COST						
					ESTIMATED CONSTRUCTION COST	$1,291,877
					BONDS AND INSURANCE (2%)	$28,123
					TOTAL ESTIMATED CONSTRUCTION COST	$1,320,000
Disclaimer: This Estimate of Probable Construction Cost is based on available information and the Engineer's experience and qualifications and represents the Engineer's best judgement as an experienced and qualified professional engineer. Since the Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over competitive bidding or market conditions, the						

THE ESTIMATED USEFUL LIFE FOR THE SUMMIT OUTFALL REHABILITATION PROJECT IS 20 YEARS

Engineering & Design	$	**160,500.00**
Construction Administration	$	**103,500.00**
Construction	$	**1,320,000.00**
Construction Contingency	$	**132,000.00**
Permitting and Advertisement	$	**2,500.00**
TOTAL PROJECT COST ESTIMATED	$	**1,718,500.00**